



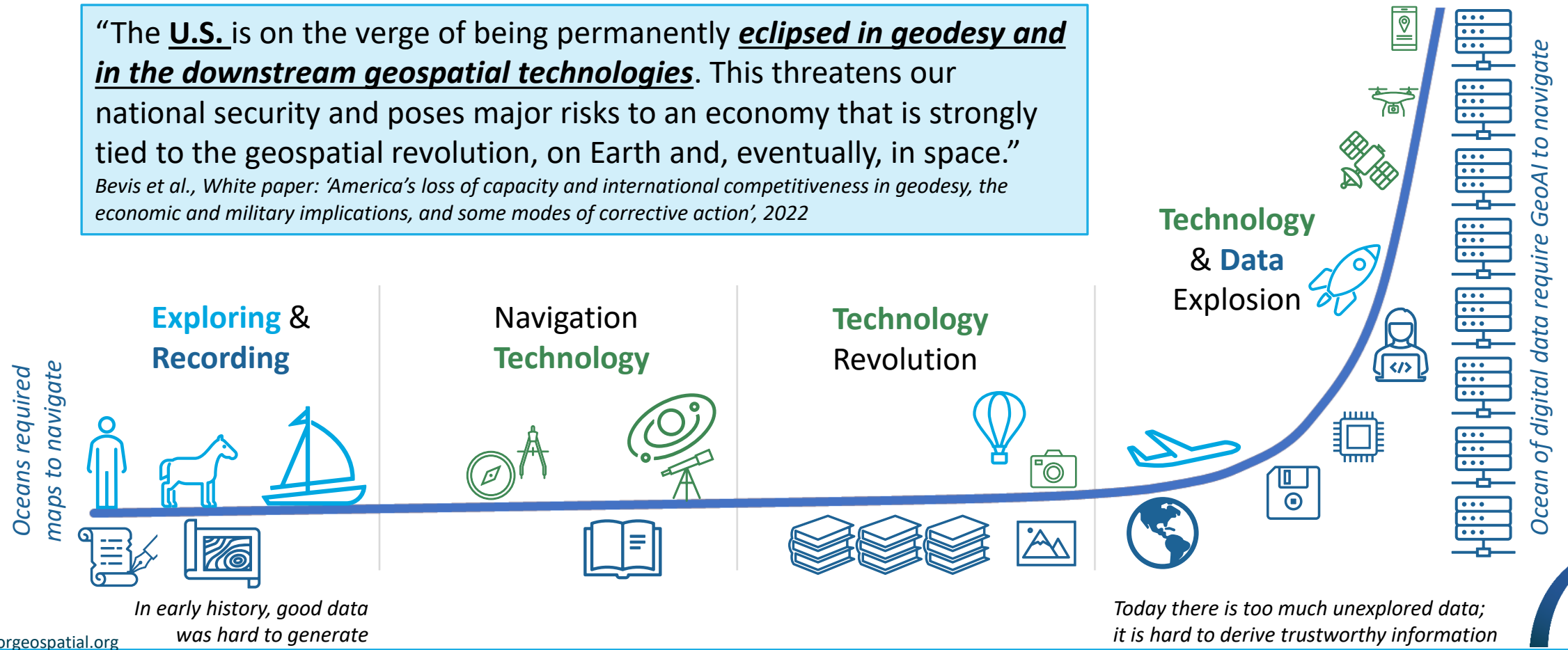
Institute Overview for the National Geospatial Advisory Committee (NGAC)

Robert Cardillo
Ken Olliff
Vasit Sagan

Digital Data Explosion Leads to a Global Geospatial Competition

“The **U.S.** is on the verge of being permanently ***eclipsed in geodesy and in the downstream geospatial technologies***. This threatens our national security and poses major risks to an economy that is strongly tied to the geospatial revolution, on Earth and, eventually, in space.”

Bevis et al., White paper: ‘America’s loss of capacity and international competitiveness in geodesy, the economic and military implications, and some modes of corrective action’, 2022



Vibrant Regional Geospatial Ecosystem

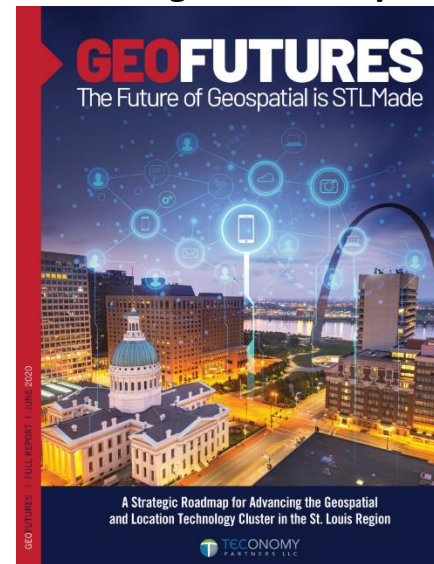


NGA
\$1.75B campus



June 2016

GEOFUTURES The Future of Geospatial is STLMade **Strategic Roadmap**



June 2020

Research and Academia



April 2022

Industry Gateway



Affiliated Activities



Innovation communities



Vision of the Taylor Geospatial Institute

To be the nation's leader in geospatial science research
and accelerate the St. Louis region's development
as a global geospatial center of excellence.

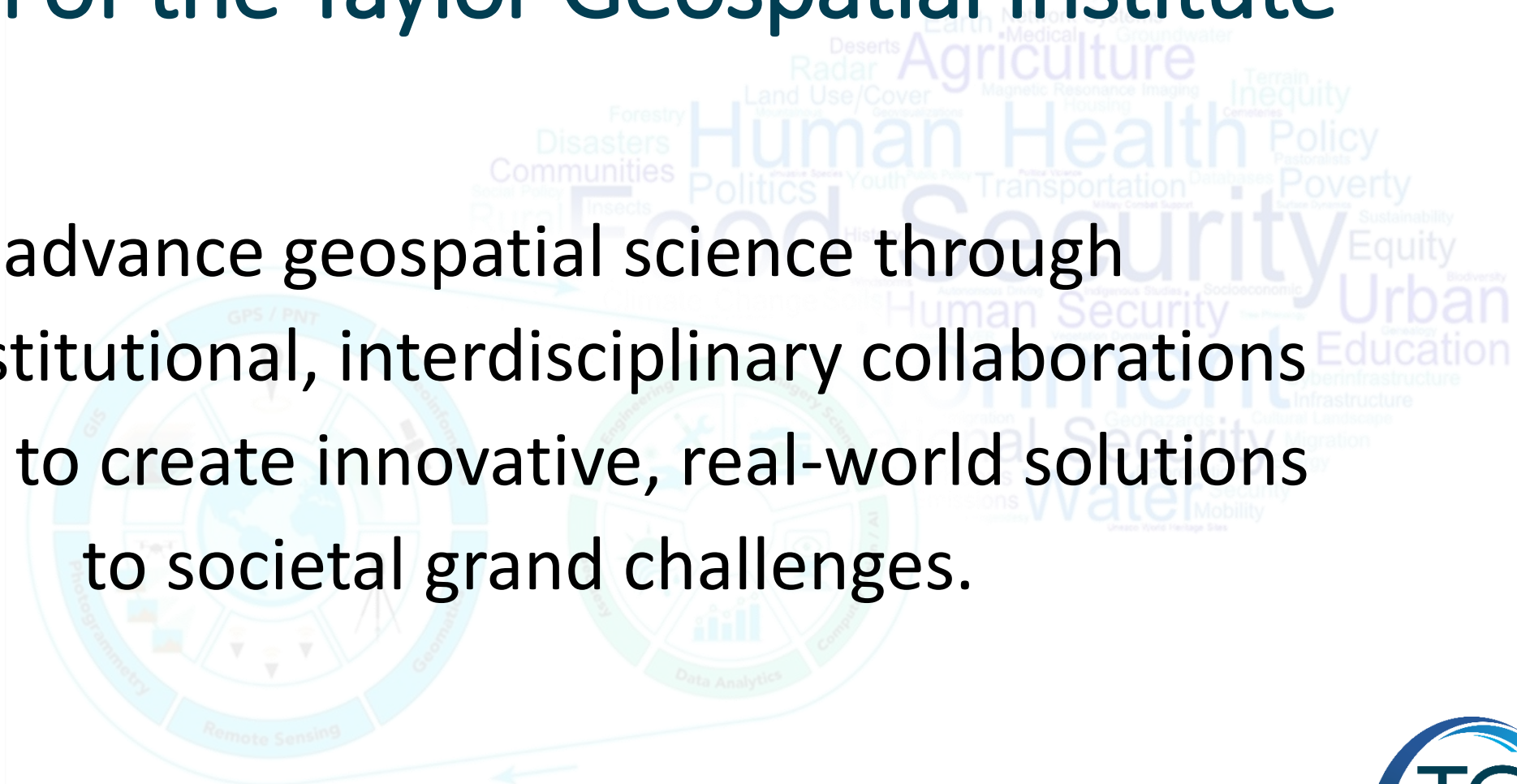


University of Missouri



Mission of the Taylor Geospatial Institute

To advance geospatial science through multi-institutional, interdisciplinary collaborations in order to create innovative, real-world solutions to societal grand challenges.

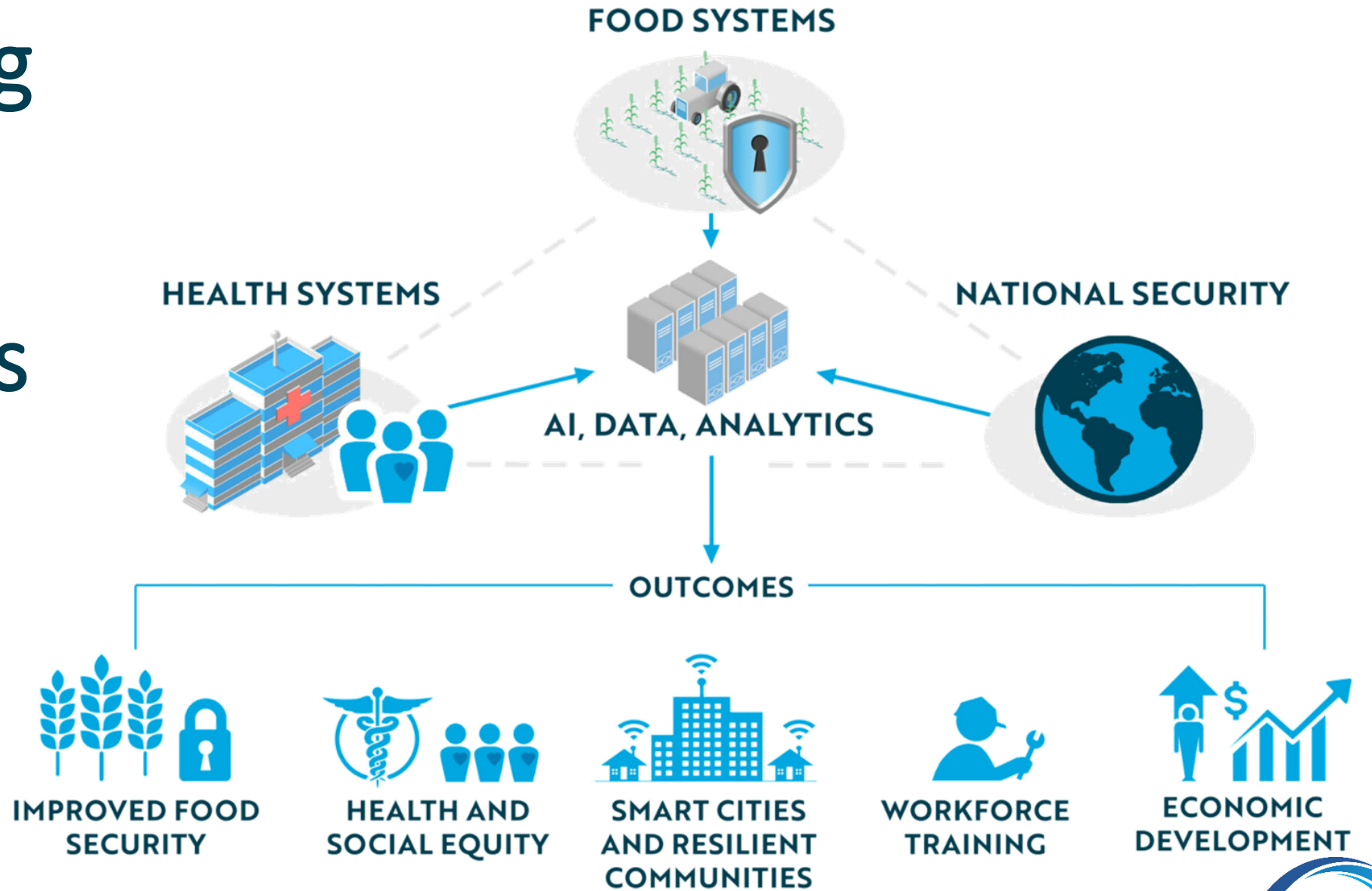


Eight-Institution Research Collaborative

Nation's Leading
Geospatial Research Collaborative
Rooted in St. Louis and the Midwest

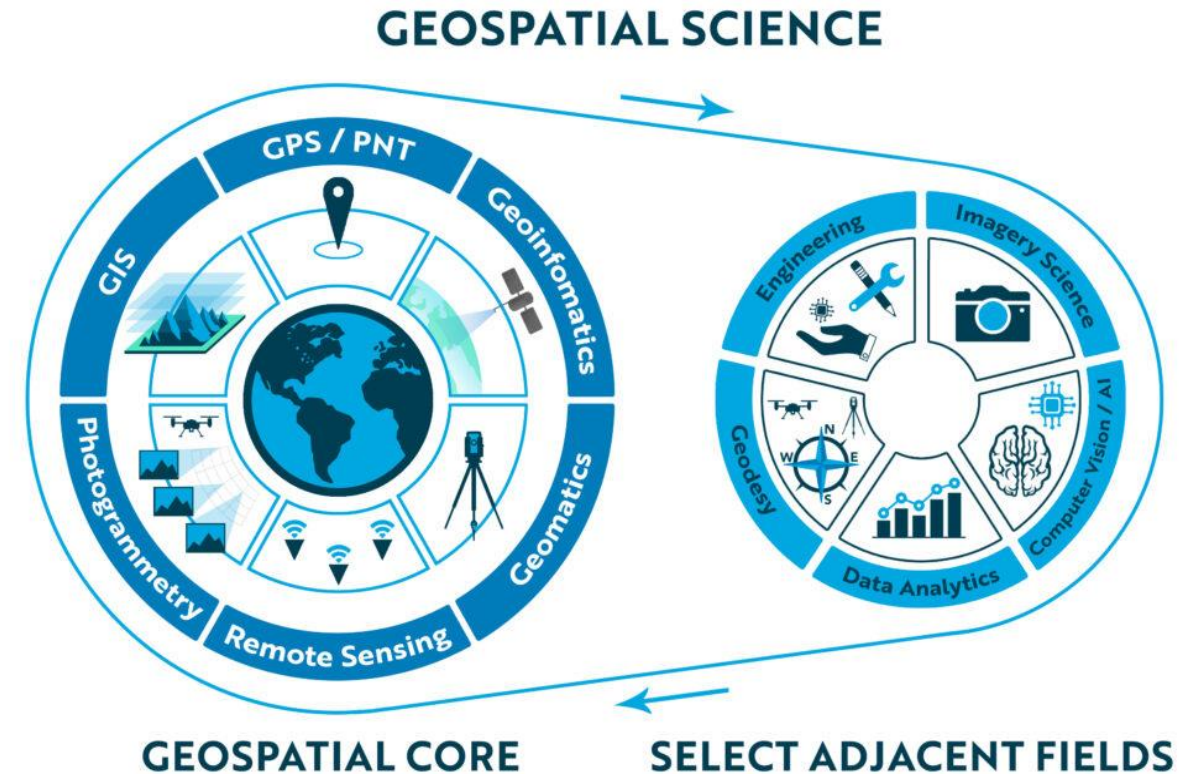


Addressing Grand Societal Challenges



Built with a Strong Geospatial Engine

- Enables new applications and research in different domains
- Addresses national gaps in geospatial science



People Are the Core of the Institute



“Perhaps the most shocking example of the **U.S. decline relative to China** is that the number of Ph.D. geodesists in the entire DOD, including the National Geospatial-Intelligence Agency (NGA), is now approaching zero.”

Bevis et al., White paper: ‘America’s loss of capacity and international competitiveness in geodesy, the economic and military implications, and some modes of corrective action’, 2022

To counter this crisis a consistent, lasting stream of government funding in geospatial sciences is needed

TGI Is Investing in People

INTERNAL FUNDING

- Block grant (2022)
- Seed grants (2023)
- Post Doc program
- Visiting Scholars
- Start-up packages

Leveraging Investments from
Philanthropy, Government, and
Private-Public Partnerships



TGI is Investing in Infrastructure

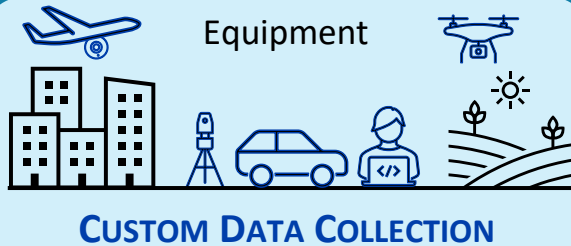
GEOSPATIAL DATA ANALYTICS LIBRARY

DATA NEEDS FOR
RESEARCHERS ACROSS
DISCIPLINES

Problem: Why? It takes 80% of research time to find/assemble quality analysis-ready data



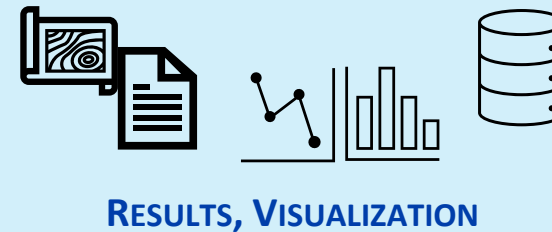
DATA



GeoAI: AI, ML, DL,... HPC



PROCESSING



INSIGHTS, VISUALS,
AND MORE TIME TO
FOCUS ON THE
RESEARCH

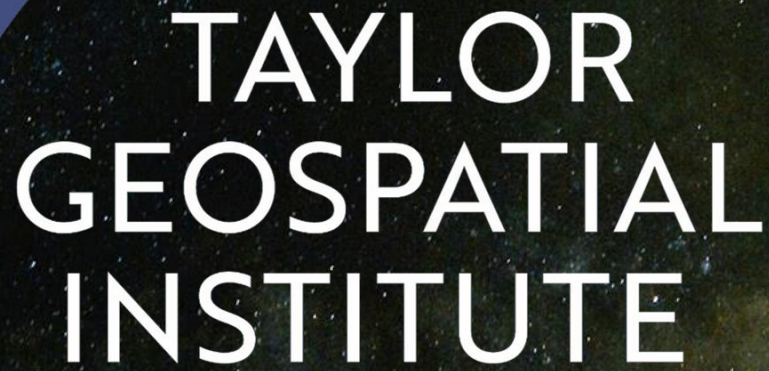
Outcome: Researchers have more time to focus on the actual research and implications



Taylor Geospatial Institute: A Unique Geospatial Research Consortium

- A unique geospatial research consortium with a research impact that is larger than the sum of its eight institutions
- Leveraging investments from philanthropy, government, and private-public partnerships
- Jump-starting the talent development engine
- Accelerating the St Louis region on its trajectory towards being a global geospatial center of excellence





TAYLOR GEOSPATIAL INSTITUTE

LOCATION. COLLABORATION. IMPACT.

Engage With Us:
taylorgeospatial.org
TGI@slu.edu

Questions?